Application No.: 10/647,442

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): An encryption data recording method comprising the steps of:

a data writing step writing encryption data in at least one of recording

media, using a data recording system with comprising a plurality of the recording media

and a plurality of magazines configured to house said recording media, wherein said data

recording system is a library and each of said recording media comprises a cartridge

memory and a tape;

a key data dividing step dividing key data of said encryption data into a plurality

of key data elements; and

a key data element storing step separately storing divided each key data element

in a plurality of the recording media, wherein:

each said recording media comprises a non-contact Integrated Circuit chip

configured to record a key data element, and a cartridge configured to record said

encryption data.

2. (original): An encryption data reproducing method which reproduces encryption

data recorded with an encryption data recording method according to claim 1, the

reproducing method comprising the steps of:

a data reading step reading encryption data written in at least one of plurality of

recording media;

2

Application No.: 10/647,442

a key data element reading step reading all said key data elements from said recording media in which a plurality of key data elements obtained by dividing key data of said encryption data are separately stored; and

a decrypting step producing said key data based on said key data elements and decrypting said encryption data using the key data.

3. (currently amended): An encryption data recording method comprising the steps

of:

a data writing step writing encryption data in part of recording media, using a data recording system with comprising a plurality of said recording media and a plurality of magazines configured to house said recording media, wherein said data recording system is a library and each of said recording media comprises a cartridge memory and a tape; and

a key data storing step storing key data of said encryption data in any one of other recording media-, wherein

each said recording media comprises a non-contact Integrated Circuit chip configured to record a key data element, and a cartridge configured to record said encryption data.

4. (original): An encryption data reproducing method which reproduces encryption data recorded with an encryption data recording method according to claim 2, the reproducing method comprising the steps of:

3

Application No.: 10/647,442

a data reading step reading encryption data written in at least one of plurality of recording media; and

a decrypting step reading said key data from any one of other recording media in which key data of said encryption data is stored and decrypting said encryption data, using the key data.

5. (currently amended): An encryption data recording system comprising:

a plurality of recording media and a drive configured to write encryption data in said recording media;

a drive which writes encryption data in a plurality of recording media and said recording medium;

a key data element storing unit which is provided with each said recording medium of said plurality of recording media and stores key data elements into which key data of said encryption data is divided; and

a control mechanism comprising the steps of producing said encryption data and writing said encryption data in at least one of plurality of said recording media by said drive, and producing a plurality of the key data elements by dividing key data of said encryption data, and separately storing divided each key data element in each key data element storing unit-;

wherein the encryption data recording system is a library and each said recording medium comprises a cartridge memory and a tape, wherein

Application No.: 10/647,442

each said recording medium comprises a non-contact Integrated Circuit chip configured to record a key data element, and a cartridge configured to record said encryption data.

An encryption data reproducing system which reproduces 6. (currently amended): encryption data recorded by an encryption data recording system according to claim 5, the reproducing system comprising:

a drive which reads encryption data from a plurality of recording media and said recording medium; a plurality of recording media and a drive configured to read encryption data in said plurality of recording media;

a key data element storing unit which is provided with each said recording medium of said plurality of recording media and stores key data elements into which key data of said encryption data is divided; and

a control mechanism comprising the steps of reading said encryption data written in said recording medium by said drive and reading all said key data elements separately stored in said each key data element storing unit, and producing the key data based on the read each key data element and decrypting said encryption data using the key data.

7. (currently amended): An encryption data recording system comprising:

a plurality of recording media and a drive configured to write encryption data in said recording media: a drive which writes encryption data in a plurality of recording media and said recording medium;

Application No.: 10/647,442

a key data element storing unit which is provided with each said recording medium of said plurality of recording media and stores key data of said encryption data; and

a control mechanism comprising the steps of producing said encryption data and writing said encryption data in part of plurality of said recording media by said drive, and storing said key data in said key data storing unit of any one of other recording media-:

wherein the encryption data recording system is a library and each said recording medium comprises a cartridge memory and a tape, wherein

each said recording medium comprises a non-contact Integrated Circuit chip configured to record a key data element, and a cartridge configured to record said encryption data.

8. (original): An encryption data reproducing system which reproduces encryption data recorded by an encryption data recording system according to claim 7,

which the reproducing system reproduces the encryption data recorded in part of plurality of recording media using key data stored in any one of other recording media, the reproducing system comprising:

a drive which reads from said recording medium, and a key data element storing unit which is provided with said recording medium and stores the key data of said encryption data; and

a control mechanism comprising the steps of reading said encryption data written in said recording medium by said drive and reading the key data stored in said key data element storing unit, and decrypting said encryption data using the key data.

Application No.: 10/647,442

9. (original): An encryption data recording system according to claim 5, wherein said recording medium is a magnetic tape.

10. (original): An encryption data reproducing system according to claim 6, wherein said recording medium is a magnetic tape.

11. (original): An encryption data recording system according to claim 7, wherein said recording medium is a magnetic tape.

12. (original): An encryption data reproducing system according to claim 8, wherein said recording medium is a magnetic tape.

13. (original): An encryption data recording system according to claim 5, wherein said recording medium is a magnetic disk.

14. (original): An encryption data reproducing system according to claim 6, wherein said recording medium is a magnetic disk.

15. (original): An encryption data recording system according to claim 7, wherein said recording medium is a magnetic disk.

Application No.: 10/647,442

16. (original): An encryption data reproducing system according to claim 8, wherein said recording medium is a magnetic disk.

17. (original): An encryption data recording system according to claim 5, wherein said recording medium is an optical recording disk.

18. (original): An encryption data reproducing system according to claim 6, wherein said recording medium is an optical recording disk.

19. (original): An encryption data recording system according to claim 7, wherein said recording medium is an optical recording disk.

20. (original): An encryption data reproducing system according to claim 8, wherein said recording medium is an optical recording disk.

21. (new): An encryption data recording method of claim 1, further comprising storing cartridge specific data in at least one of the plurality of recording media, to specify recording media storing the plurality of key data elements.

22. (new): An encryption data recording system of claim 5, further comprising a device that stores cartridge specific data in at least one of the plurality of recording media, to specify recording media storing the plurality of key data elements.

Application No.: 10/647,442

23. (new): An encryption data recording system of claim 5, wherein number of key data

elements is equal to number of recording mediums in said plurality of recording media.

24. (new): An encryption data recording system of claim 7, wherein key data is stored in

a single recording medium in said plurality of recording media, other than said plurality

of recording media storing said encryption data.

25. (new): An encryption data recording system of claim 26, wherein said key data is

undivided.

26. (new): The method of claim 1, further comprising storing more than one key data

element in at least one of said recording media.

9